The New HSIIAC

Dr. Kristen K. Liggett
HSIIAC Technical Director

HSIIAC Reborn

New Name - New Game

- CSERIAC est 1988; becomes HSIAC in 2000; renamed HSIIAC in 2004
- Steering Committee recommends: Reject contract option with incumbent (10/04)
- New IAC business concept approved by DDR&E for HSIAC (1/04)
- DTIC closes out HSIAC contract (3/04)
- New Contract stalled by GSA restructuring
- New HSIIAC: Sep 05

HSIIAC Mission

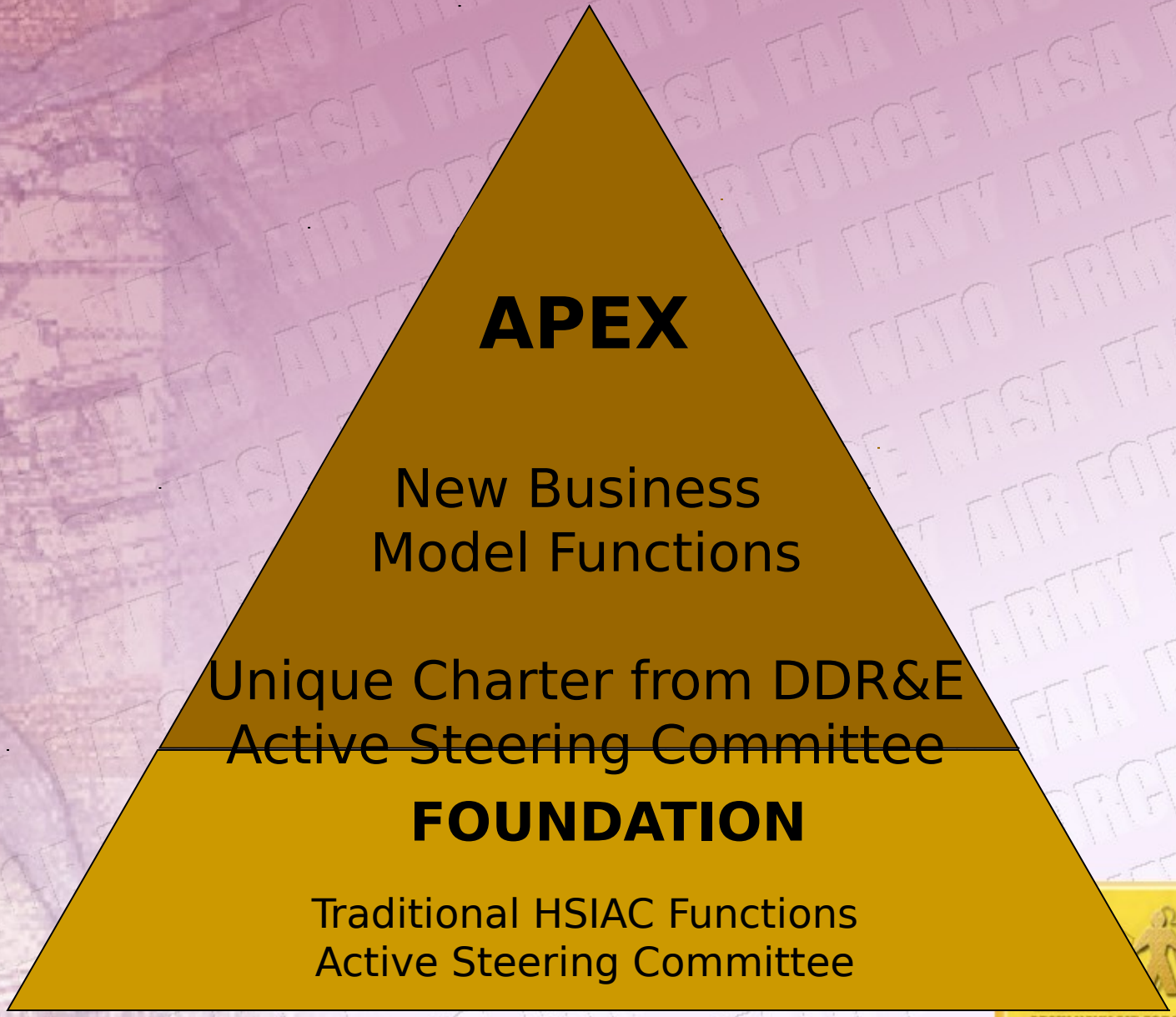
- To support DoD & Federal research, development, test, and acquisition activities
- To assist DoD components/offices, other Government agencies, academia, Government contractors, and U.S. industry as authorized, in the analysis and dissemination of "information" and transition of technology within the human systems areas
- To promote and service a strong HSI Community of Practice across DoD, Federal agencies, and industry

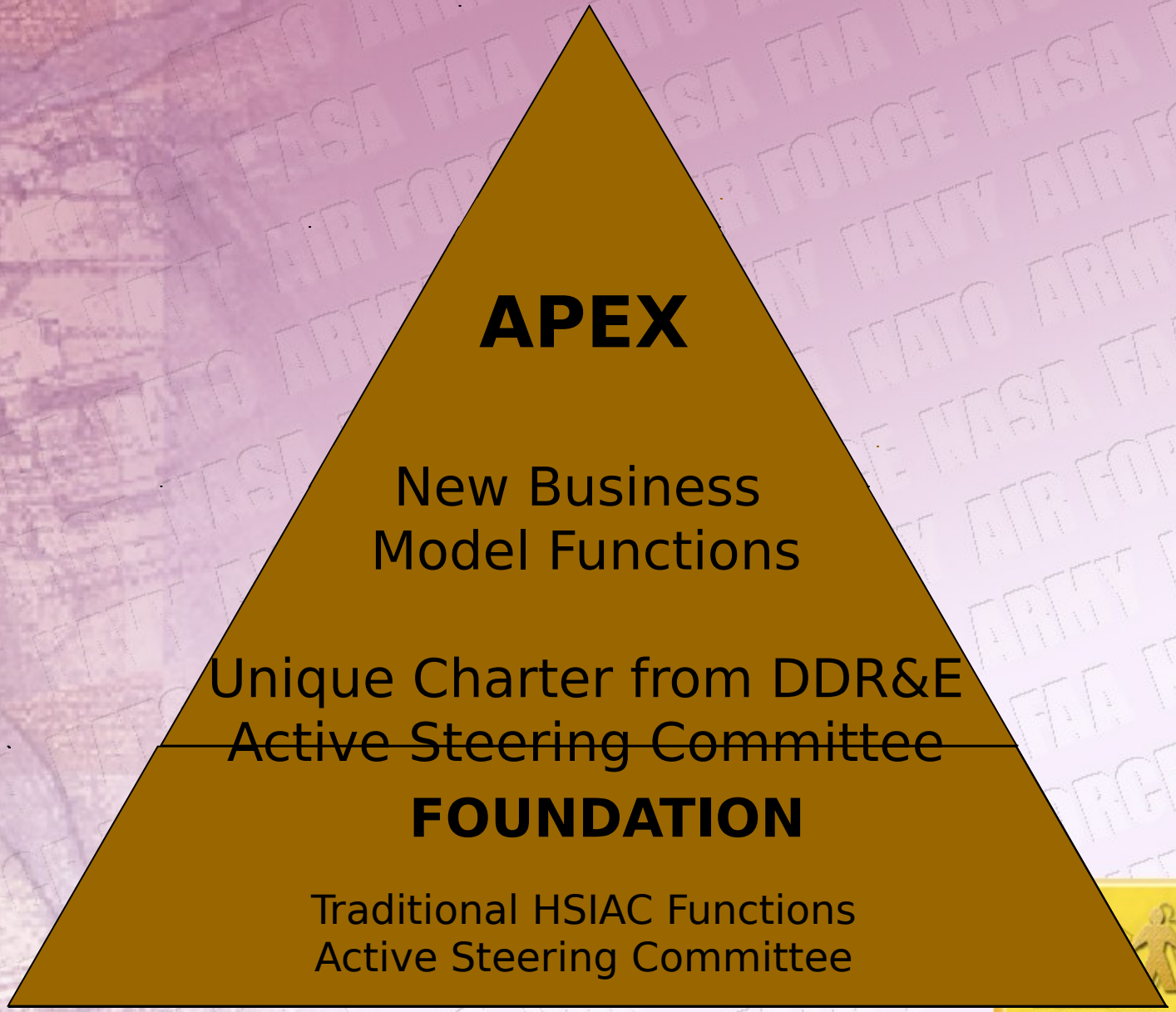
HSIIAC Free Market Model

- **The OSD IAC Charter**
  - unique, previously unexploited market advantage which incentivizes vendors to invest and assume risk in startup costs and core activities
  - profit potential in the HSI domain coupled with the need to recoup at-risk investments further motivates vendors to aggressively penetrate the DOD/Federal/vendor HSI market at a competitive price point
- **Oversight by Steering Committee vital to ensuring market advantage**

HSIIAC New Business Model Highlights

- Low-cost, speedy gateway to leading HSI vendors and thought leaders
- Top-of-the-line HSI expertise to provide timely answers
- State-of-the-art knowledge elicitation and brain storming techniques
- Transition HSI technologies


APEX
New Business
Model Functions
Unique Charter from DDR&E
Active Steering Committee
FOUNDATION
Traditional HSIAC Functions
Active Steering Committee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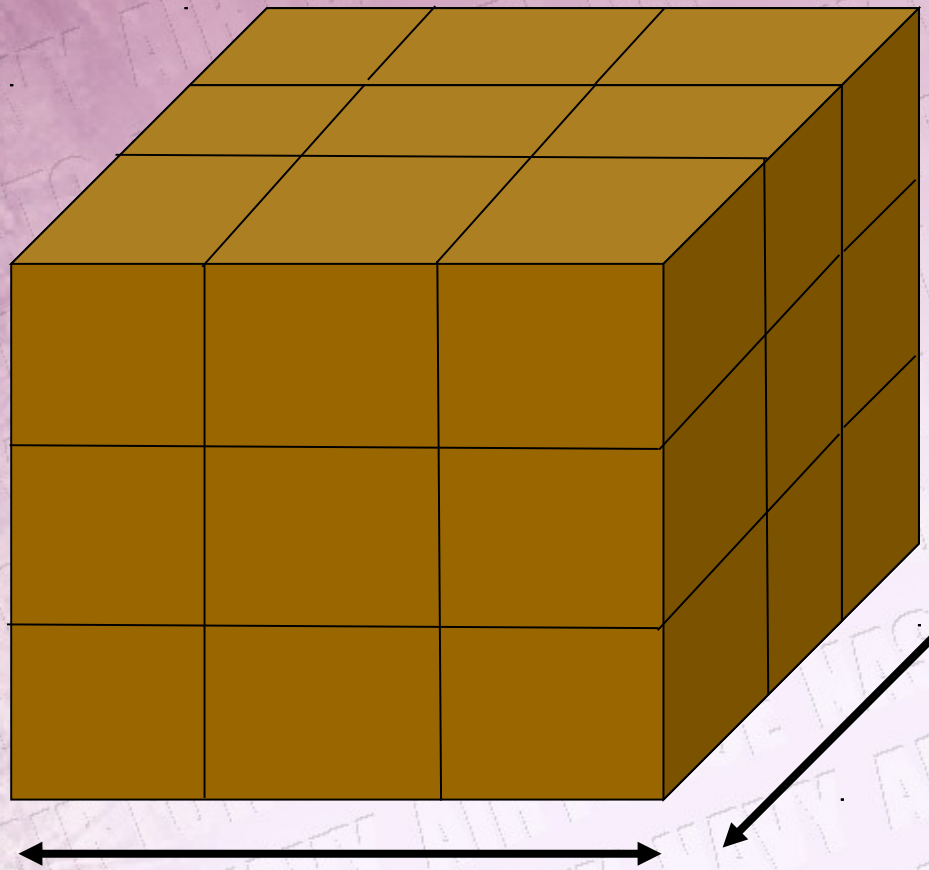
Transitioning HSI Technology

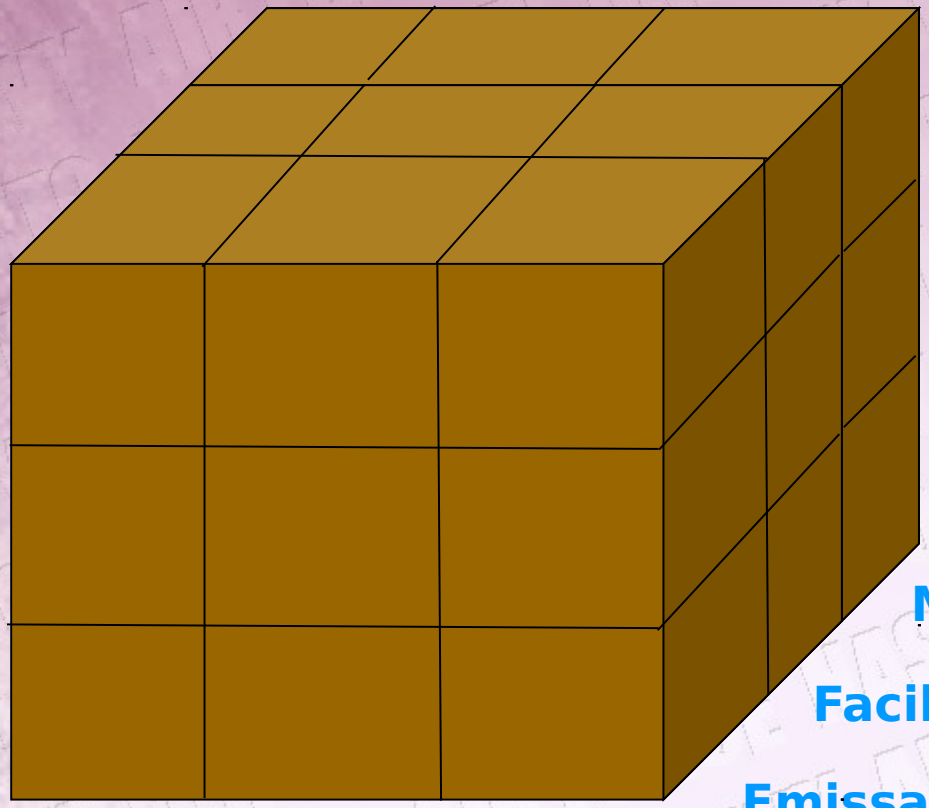


Dimension 1: Customer's Sponsor

Dimension 2: Customer's Place in the Value

Dimension 3: HSIIAC's Role In the Transition Process

Transitioning HSI Technology



Joint

Multiple

Single

Matchmaker

Facilitator

Emissary

Technology Developers

Next Users

Key Stake-Holders

HSTAC
ARMY NAVY AIR FORCE NASA FAA NATO

Charter In Action

- To ensure the bidders understood the value of the charter
  - Created tasks in the Statement of Objectives
  - Evaluated their approach to performing new tasks
- Given no core funding, bidders are motivated to exploit charter

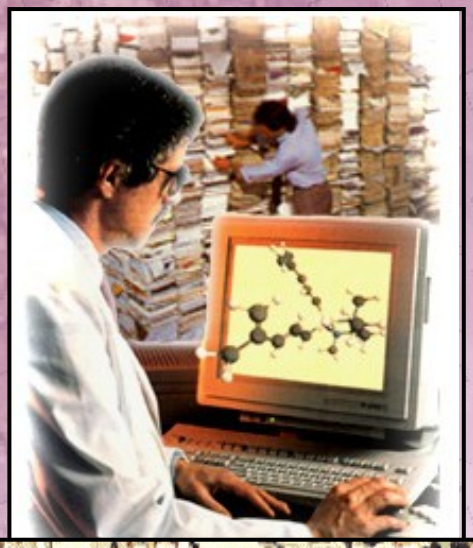
HSIIAC Source Selection Team

- Naval Air Systems Command
- Naval Sea Systems Command
- Space and Naval Warfare System Command
- Army Research Laboratory
- Army Research Institute
- Army Natick Soldier Center
- Air Force 311th Human Systems Wing
- Air Force Research Lab/Human Effectiveness
- Joint (Air Force/Navy) Cockpit Office
- NASA, Johnson Space Center
- Federal Aviation Administration

Highlights of the Contractor's Proposal

- Contractor Qualifications
  - Northrop Grumman – Dr. Lawrence Wolpert
  - Alion
- Responsiveness to new model
  - Technical Area Tasks (TAT)
  - Subscription Accounts
- Commitment to succeed

HSIIAC Products & Services



- Answers to Questions
- Analytic Services and Information Dissemination

Our cumulative knowledge base grows as you use it

Answers to Questions

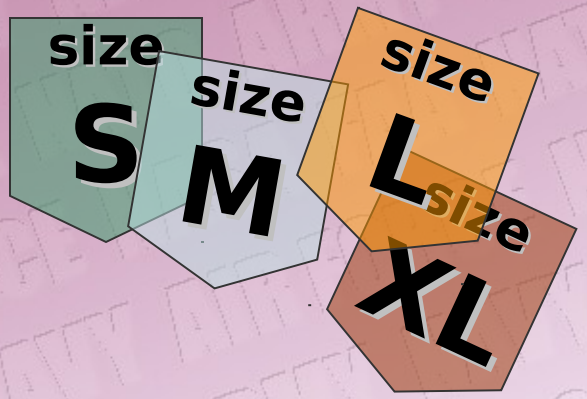
- The Library…
  - provides information
  - offers data as entities
  - assigns no ranking

  can give you the source.

- **The IAC…**
  - **analyzes data**
  - **synthesizes data**
  - **evaluates information**

  can give you the *answer*.

Typical HSIIAC Questions



size S

- How fast can a pilot respond to a flight control deviation?
- How can new controls be developed and evaluated to minimize user injury?

size M

- What are the precursors to aviation accidents?
- What HF criteria developed for aircraft apply to automobil

size L

- What science exists on physical fitness programs?
- How do we make a presently unusable IT system usabl

size XL

- What process/design attributes ensure a usable data link system?
- What new HF criteria should be considered in system acquisition?

HSIAC
ARMY NAVY AIR FORCE NASA FAA NATO

Information Dissemination

ST Information Dissemination

- Databases
- SOARs
- Handbooks
- Critical Reviews
- Workshops
- Symposia
- Models
- Simulations
- Technology Assessments
- Multimedia Products

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Human Systems IAC
GATEWAY
Published by the Human Systems Information Analysis Center, formerly known as CSERIAC
inside:
Special Issue:
Human Systems Integration
U.S. Army's Manpower and Personnel Integration (MANPRINT) Program: Yesterday, Today, and Tomorrow 3
Human Systems Integration (HSI) in the U.S. Navy's System Acquisition Process 4
The U.S. Air Force Human Systems Integration Program "Pay Me Now… Or Pay Me Later" 5
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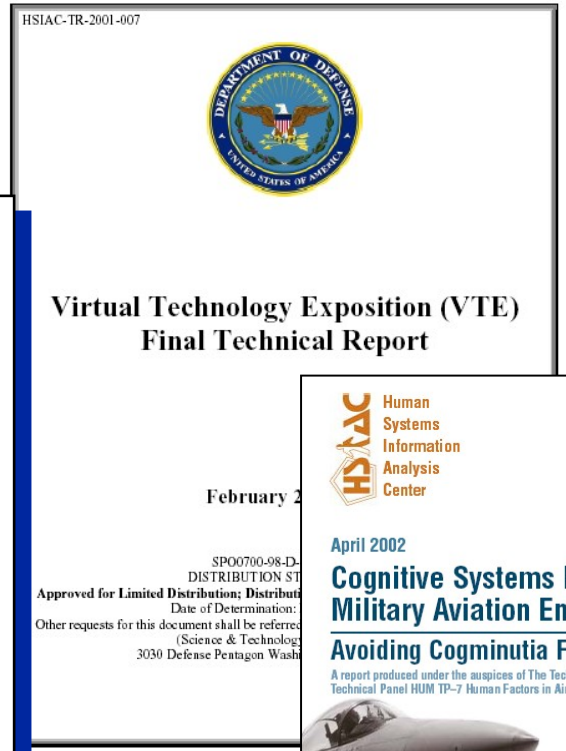

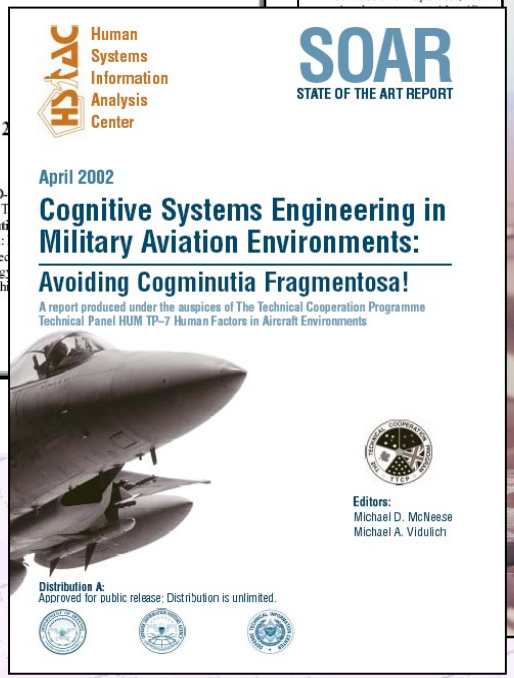
Human Systems Information Analysis Center
SOAR
STATE OF THE ART REPORT
April 2002
Cognitive Systems Engineering in Military Aviation Environments:
Avoiding Cogminutia Fragmentosa!
A report produced under the auspices of The Technical Cooperation Programme Technical Panel HUM TP-7 Human Factors in Aircraft Environments
Editors:
Michael D. McNeese
Michael A. Vidulich
Distribution A:
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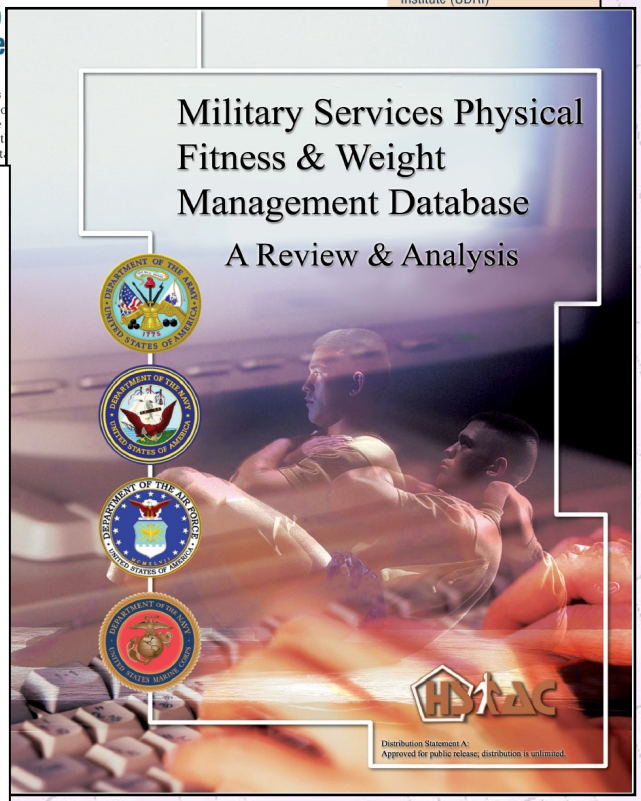
Military Services Physical Fitness & Weight Management Database
A Review & Analysis
HSIAC
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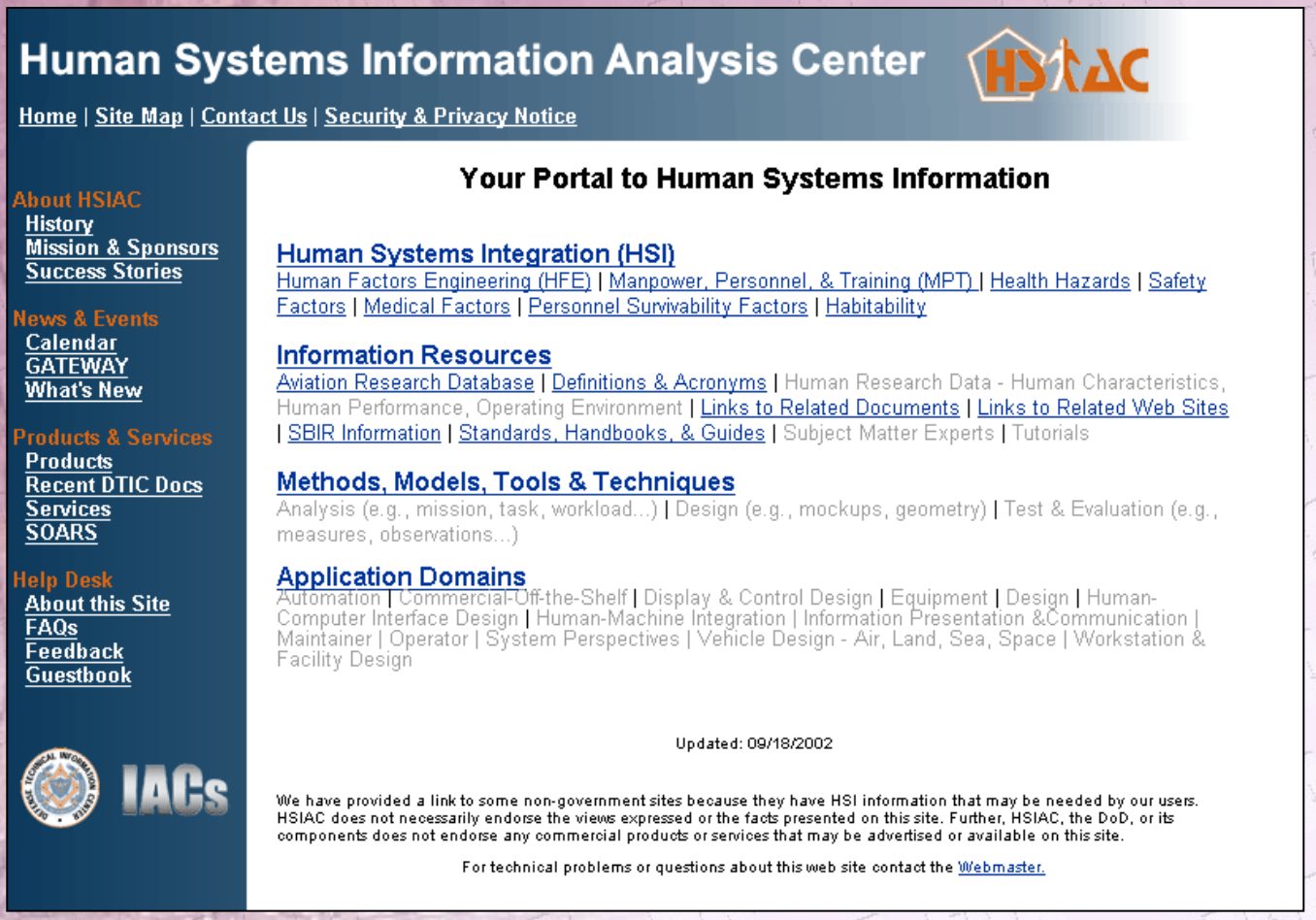
Information Dissemination

Web Page

- Interactive Features
- HSI Portal
- Virtual HSIIAC Shopping Mall

Community Products

- Lessons Learned
- User Manuals
- Training Support
- Tutorials
- Design Documents
- Tools & Techniques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Methods, Models, Tools & Techniques
Analysis (e.g., mission, task, workload...) | Design (e.g., mockups, geometry) | Test & Evaluation (e.g., measures, observations...)
Application Domains
Automation | Commercial-Off-the-Shelf | Display & Control Design | Equipment | Design | Human-Computer Interface Design | Human-Machine Integration | Information Presentation &Communication | Maintainer | Operator | System Perspectives | Vehicle Design - Air, Land, Sea, Space | Workstation & Facility Design
Updated: 09/18/2002
We have provided a link to some non-government sites because they have HSI information that may be needed by our users. HSIAC does not necessarily endorse the views expressed or the facts presented on this site. Further, HSIAC, the DoD, or its components does not endorse any commercial products or services that may be advertised or available on this site.
For technical problems or questions about this web site contact the Webmaster.

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DoD Tech Advisors
Dr Bob Foster
Dr Ken Boff

Steering Committe

Welcome Back

Jeff Bradshaw
Institute for Human and Machine Cognition
Pensacola, FL

Congratulations! Human systems information
analysis is increasingly being recognized as a
enabler, I am glad to see the crucial role of th
HSIAC enhanced and strengthened through t
new developments.

Professor Erik Hollnagel
Cognitive Systems Engineering Laboratory
University of Linköping, Sweden.

As we are caught in a self-reinforcing
technological capabilities and user de
importance of ensuring safe and efficie
of our joint cognitive systems cannot be
underestimated. The engineering and de
communities therefore need the services
caliber specialist organisations such as HS
during all phases

Robert M Taylor
Air Systems Department
United Kingdom

"I can honestly say that Gateway is the only
professional publication that I would read
cover to cover, and genuinely feel informe
latest thinking from military human factor
and shakers. I have missed receiving Gate
to seeing it again in the near
Good
model".

Mica Endsley
SA Technologies
Marietta, GA

As a small business owner, I have found the service and support provided by HSAIC to be invaluable. It is great to know that there is a place where you can find little known facts and research on important human factors topics in a such a short period of time, and all for free. HSAIC is one of the most useful government services I know of. I look forward to

Edward Tenner
Lemelson Center for the Study of Invention & Innovation
National Museum of American History

The scope, originality, and quality of research at HSIAC impressed me as outstanding when I visited as a colloquium speaker and toured the laboratories. I am delighted to learn of the new business model that will enhance its efficiency and impact.

Mark D. Rodgers, Ph.D.
Federal Aviation Administration
Washington, DC

Congratulations to HSIAC on increasing its ability to address the needs of its customers and making swift changes in course to enhance the Web portal for resources related to Human Systems Integration. Program managers and researchers need access to large amounts and a wide spectrum of information, and

Nancy J. Cooke
Arizona State University East
Mesa, AZ

HSIAC has been a valuable information resource for the human factors community for the last 16 years and its recent reincarnation promises to exceed these previous achievements. The services provided by HSIAC are increasingly crucial given the proliferation of information, data, and reports in

Michael Drillings, Ph.D.
G-1/ Director for MANPRINT,
Washington, DC

I expect that HSIAC will help us keep up with the latest literature and techniques, and establish itself as a must source for human systems integration analysts.

Hendrick W. Ruck, PhD, SES
Director, Human Effectiveness
Air Force Research Laboratory

The HSIAC is a critical DoD resource for both the acquisition and the operational communities. The fresh approach we're embarking on will restore the energy and influence of the IAC it had been known for.

Hal W. Hendrick, Ph.D., CPE, DABFE
University of Southern California
(Past President of the HFES, IEA, and BCPE)

I am delighted to see the continuation of the extremely important contribution of the HSIAC to the discipline. It has been an invaluable resource for researchers and practitioners alike. The new business model and related transformation as the DoD IAC promises to make this service even more useful.

Neville Moray
University of Surrey

I was very pleased to learn that HSIAC will be continuing "under new management". The tradition of work by Wright Patterson through HSIAC is an outstanding source of human factors expertise. As HF becomes more appreciated, there will be ever more need for such centres to support research and development.